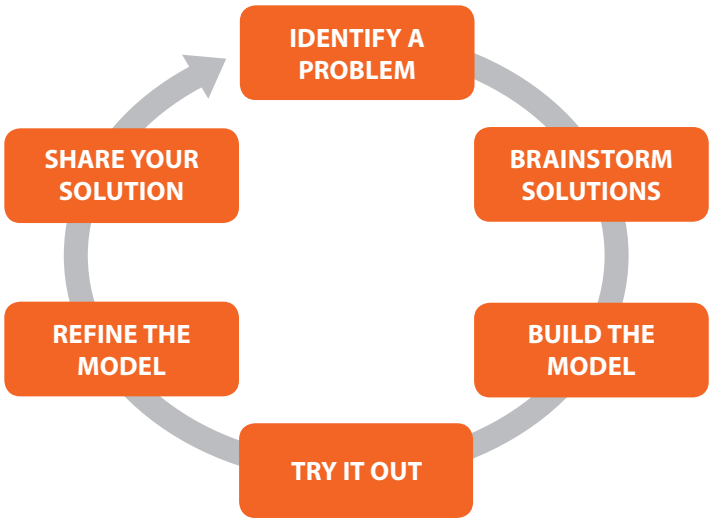
THE NATIONAL CENTER ON Quality Teaching and Learning

Teacher Time
Webinars for Head Start Preschool Teachers

DESIGN ENGINEERING PROCESS



IDENTIFY A PROBLEM
What is the problem that needs to be solved? Does something need to be fixed or need improvement? How can it be better? *How can we get materials from one place to another more efficiently?*
BRAINSTORM SOLUTIONS
Generate ideas for different ways the problem can be addressed. Ask questions to help children come up with ideas. *Go back and forth between locations; try using a blanket to carry the materials; build a wagon; make a box, etc.*
BUILD THE MODEL
Here's your chance to pick one of the ideas and create it. The teacher may need to provide materials for this step. *Use pieces of cardboard from the recycling area to build a box.*
TRY IT OUT
Try out your solution and test your model. *Put the materials into the box and tried pushing it from one place to another.*
REFINE THE MODEL
Now that you have tried out your model, why does it work or not work? What improvements can you make? *Teacher: "Oops, the bottom fell off. How we can fix this?" Children: "Let's put some more tape on it! Find a stronger bottom!"*
SHARE YOUR SOLUTION
Tell us how the problem was solved. What solution did you come up with, and how did it work? *Take pictures of the box and put them on display or have peers tell a story about it at circle.*

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For more information, contact us at: **NCQTL@UW.EDU** or **877-731-0764**
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